Updated Drinking Water Source Protection Plan

Fairview City Water Company

System Number 20012

Lower Well #1

Source # WS0004

1. Introduction

1.0 INTRODUCTION

1.1 System Information:

Water System Name: Fairview City Water Company
Water System Number: #20012
Address: PO Box 97
Fairview, UT 84629
Phone Number: 435-427-3858 (O)/435-362-2738(C)

1.2 Source Information:

Source Name: Lower Well #1
Source Number: WS004
Source Type: Well

1.3 Designated Person

Name: Justin Jackson
Fairviewcitysewer@gmail.com

2. Delineation Report

No changes have occurred to the delineation.

3. Inventory of Potential Contamination Sources (PCS) (incl. List, hazards, prioritization, location and map)

3.1 List Potential Contamination Sources

The previous inventory listed 15 homes with septic tank systems and State Highway 31 as PCS's. Since the last update 3 additional homeshave been constructed in the management area for the Lower Well. Also added to the inventory is an irrigation

company retention basin, and a private well. One home was removed from the inventory. See Table III-I for the list of identified PCS's.

Table III-1
PCS List

PCS	Name of Facility	Contact Information	Hazards	Quantities
DWSP Zone 1				
1-1	No PCS identified in Zone 1			
DWSP Zone 2				
2-1	1 Home	N/A	Household Chemicals, Fertilizers, Pesticides, Herbicides. Improperly operating onsite septic systems	< 5 gal Chem/Home; <25 lbs Fert/Pest/Herb/Home; Approx. 250 gpd/home sewage.
DWSP Zone 3				
3-1	10 Homes	See 2-1 Above		
3-2	Private Well Water Right 65-2344	Dale S. Argyle 206 N. 500 W Bountiful, UT 84010	Improperly stored chemicals near the well head.	Unknown
DWSP Zone 4				
4-1	7 Homes	See 2-1 Above		
4-2	SR-31	UDOT Region Four 210 W 800 S Richfield, Utah 84701	Transport of hazardous materials along transportation route	Unknown
4-3	Water Retention Basin	Cottonwood-Gooseberry Irrigation Company PO Box 425 Fairview Ut, 84629	Embankment failure could result in flooding .	Unknown

3.2 Identify Hazards

The hazards associated with the 19 homes include hazards due to common household chemicals as well as releases from onsite septic systems. Septic tanks and drainfields can release disease causing bacteria and viruses and increase nitrate levels if the systems are not operated correctly. Homes owners typically use and store small amounts of fertilizers and pesticides. State Highway 31 is identified as a PCS due to the possible transport of

hazardous materials, or the release of motor fuel. A water retention basin was identified as a hazard due to the possible damage caused by failure of the berm and the release of sediment.

3.3 Prioritize the Inventory

A hazard evaluation was completed using the scoring criteria shown in Table III-I. The resulting score for each PCS is provided with a priority ranking in Table III-II.

Table III-I

Contaminant Hazard Evaluation Scoring Criteria

Likelihood of Contamination		
Source Containment	Located Indoors =	0
	Outdoors, Above Ground =	5
	Outdoors, Below Ground =	10
	Inadequate Storage =	15
	If FPCS is adequately controlled, subtract 5 from the Source Containment Score	
Time of Travel	15-year Zone, far =	3
	15-year Zone, near =	5
	3-year Zone, far =	7
	3-year Zone, near =	9
	250-day Zone, far =	11
	250-day Zone, near =	13
	Within Zone 1 =	15
Severity of Potential Contamination		
Quantity	<55 gallons =	1
	56-100 gallons =	3
	101-500 gallons =	6
	501-1,000 gallons =	9
	1,001-10,000 gallons =	12
	>10,000 gallons =	15
Health Risk	Low =	5
	Medium =	10
	High =	15

Table III-II

PCS Risk Hazard Scoring and Priority

PCS	Type	Source Containment	Time of Travel	Quantity	Health Risk	Total	Priority
2-1	Residents	5	13	15	10	43	1
3-1	Residents	5	9	15	10	39	2
3-2	Private Well	5	7	9	10	31	6
4-1	Residents	5	5	15	10	35	3
4-2	Highway SR-31	5	5	12	10	32	5
4-3	Retention Basin	5	3	15	10	33	4

3.4 Potential Contamination Source Locations

A map is attached showing the location of each PCS.

4. Assessment of PCS Hazards

This update completed a new assessment of all PCS's identified. The hazards identified in Table III-1 are each assessed as adequately or inadequately controlled based on one of the four types of hazard controls identified by the Division of Drinking Water (R309-600-1 0(2)(a) through (d)). These controls are described in Table IV-I.

Table IV-I
Hazard Control Descriptions and
Assessment Procedure

Control Type	Description	Procedure
Regulatory Controls	Regulatory Controls are codes, ordinances, rules, and regulations which regulate a PCS hazard.	1. Identify the enforcement agency. 2. Cite and/or quote applicable references in the regulation, rule or ordinance which pertain to controlling the hazard. 3. Explain how the regulatory controls affect the potential for ground water contamination. 4. Verify that the hazard is being regulated by the enforcement agency. 5. Assess the hazard as "Adequately Controlled" or "Not Adequately Controlled" and set a date to reassess the hazard if "Adequately Controlled."
Best Management Practices (BMPs)	BMPs include practices and procedures currently being used by the PCS to control a PCS hazard.	1. List the specific BMPs which have been implemented by the PCS management to control the hazard. 2. Indicate that the PCS is willing to continue the use of these BMPs. 3. Explain how these BMPs affect the potential for ground water contamination. 4. Assess the hazard as "Adequately Controlled" or "Not Adequately Controlled" and set a date to reassess the hazard if Adequately Controlled.
Physical Controls	Physical Controls are man-made structures and impoundments which prevent a hazard from entering the drinking water source.	1. Describe the physical control(s) which have been constructed to control the hazard. 2. Explain how these controls affect the potential for contamination. 3. Assess the hazard as "Adequately Controlled" or "Not Adequately Controlled" and set a date to reassess the hazard if Adequately Controlled.
Negligible Quantity Controls	Negligible Quantity Controls relate to the amount or toxicity of a hazard that is used by a PCS. The control deals with the risk of contamination and determining whether that risk is negligible or not significant enough to warrant further management.	1. Identify the quantity of the hazard that is being used, disposed, stored, manufactured, and/or transported. 2. Explain why this amount is a negligible quantity. 3. Assess the hazard as 'Adequately Controlled' or "Not Adequately Controlled" and set a date to reassess the hazard if Adequately Controlled.

Table IV-II includes the hazard assessment for each PCS and its hazards. Reassessment dates are only listed for those PCSs where an applied control is assessed as adequately controlled.

Table IV-II
Assessment of PCS Hazards

Priority Rank	PCS Name & No.	Applied Control	Description of Control	Assessment Status/ Reassessment Date
1-3	Residents 2-1, 3-1, 4-1	Regulatory	1. Utah DEQ, Water Quality. 2. Utah Administrative Code R317-4 3. Permits for new On Site Waste Water Systems are issued by Central Utah Public Health Department. 4. On Site systems are not inspected or controlled once placed in use. 5. Household chemicals are stored and used in small quantities. 6. Contributions from multiple homes may not be small.	Inadequately Controlled/ NA
4	Retention Basin 4-3	Regulatory	1. Utah Division of Water Rights	Adequately Controlled/2026
5	SR-31 4-2	Best Management Practices	1. Any spill of hazardous waste is reported by first responders and emergency crew and cleanup efforts are initiated. 2. Federal law requires reporting of spills of hazardous materials during transportation. 3. Remediation efforts may include removing all the contaminant and any contaminated soils.	Adequately Controlled/ 2026
6	Private Well (3-2)	Regulatory	1. Utah Division of Water Rights issues well drilling permits. 2. Once wells are in operation they are not inspected. 3. Water Right 65-2344 4. Improper storage of hazardous chemicals near the well can result in contamination.	Inadequately Controlled/ NA

5. Management of Existing Potential Contamination Sources

As demonstrated in the risk assessment, the greatest risk is assigned to the homes and the activities occurring at the homes. Efforts to mitigate these risks have centered around public education. The City has used mailers explaining the hazards associated with onsite septic systems, and the use of common household chemicals.

6. Management of Future Potential Contamination Sources

No Changes.

7. Implementation Schedule

Mailers educating homeowners on the risks associated with septic systems and household chemicals will be prepared and distributed by the end of 2023.

8. Resource Evaluation

No changes.

9. Recordkeeping Section

A copy of the original DWSP Plan was obtained from the Utah Division of Environmental Quality and placed in the record.

10. Contingency Plan

Previously approved by the Division, no changes.

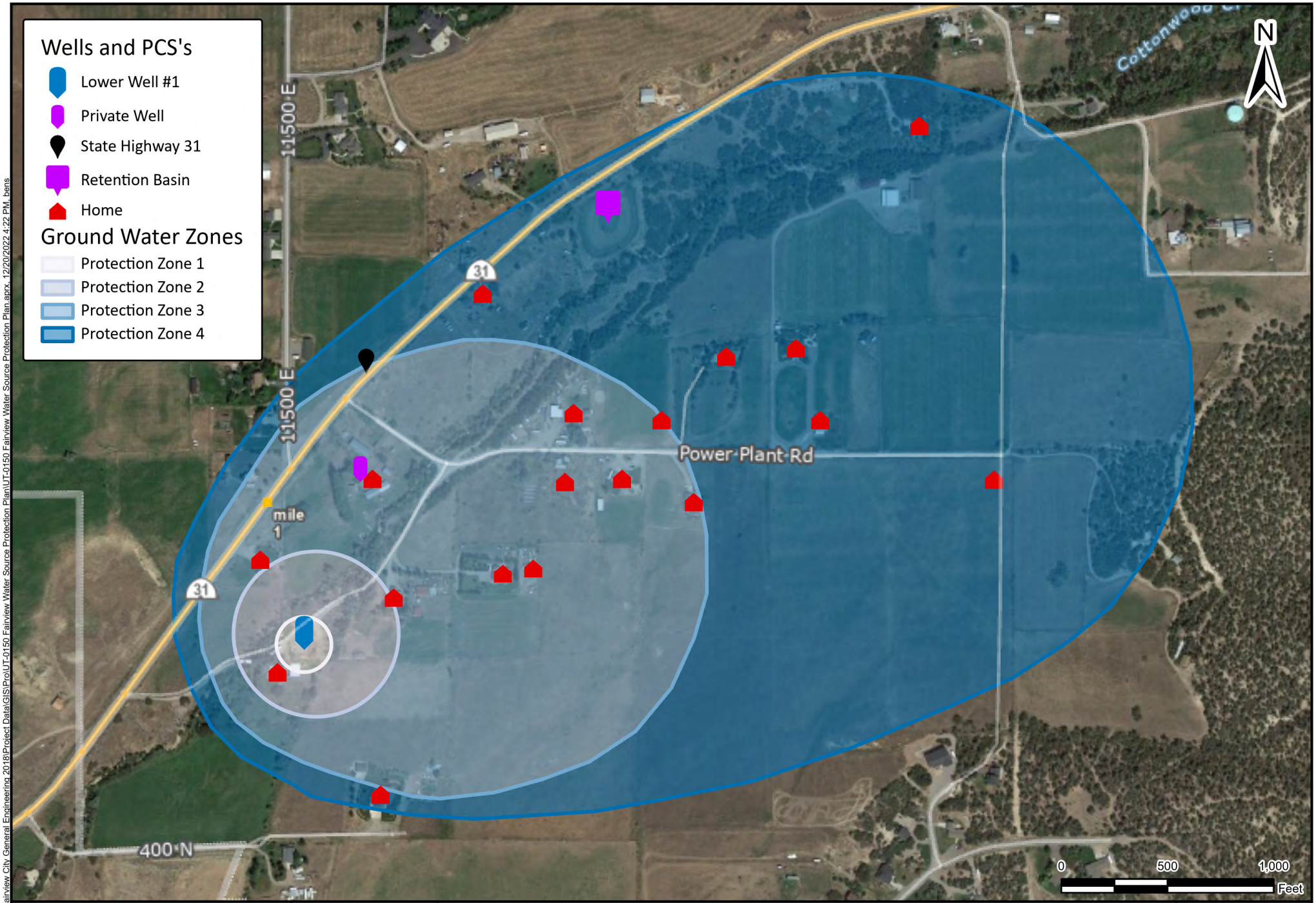
11. Public Notification

Previously approved by Division, no changes.

12. Waivers

Due to the presence of homes and the construction of new homes within the management area the Fairview water system does not qualify for use waivers.

The Lower Well #1 is not completed within a protected aquifer and does not qualify for a Susceptibility Waiver.



HORROCKS ENGINEERS

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Lower Well #1 PCS's - 2022

DATE 12/20/2022

DRAWN

Figure 1

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